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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,152	12/15/2003	Bradley L. Todd	2002-IP-006658U1	3665
7590	11/17/2005			
Robert A. Kent Halliburton Energy Services 2600 S. 2nd Street Duncan, OK 73536-0440			EXAMINER SUCHFIELD, GEORGE A	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,152

Applicant(s)

TODD, BRADLEY L.

Examiner

George Suchfield

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 26-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date 2/22/04; 11/22/04; 12/13/04; 3/16/05 Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-25, drawn to a method of treating a subterranean formation, classified in class 166, subclass 300.
 - II. Claims 26-43, drawn to a composition, classified in class 507, subclass .

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product or composition could be used in the treatment of permeable media other than the subterranean formation of the Group I invention, e.g., in a soil consolidation or remediation process, or in the treatment or cleaning of a filter means in an above-ground sewage or water-treatment plant.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Robert A. Kent on November 9, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-25.

Affirmation of this election must be made by applicant in replying to this Office action. Claims

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26-43 stand withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2, 5, 6, 10, 11, 18, 19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2, 5, 6, 10, 11, 18, 19 and 21 are deemed indefinite in being drawn to improper Markush groupings. As noted in MPEP Section 2173.05(h), the use of the term "comprising" or "comprises" is improper in setting forth the Markush grouping. Accordingly, in line 1 or 2 of each of these claims, the transitional phrase "comprises" must be changed to, -- is selected from the group consisting of -- or -- is -- .

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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9. Claim 1-5, 7, 8 and 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Harris et al (6,763,888).

Harris et al discloses a process for degrading a filter cake comprising both an acid-soluble portion and a polymeric portion by contacting the filter cake with a degradation composition comprising both a delayed-release acid component, such as an ester, and a delayed-release oxidizer component, such as a metal peroxide. While Harris et al (note col. 3, lines 4-12) refers to the “decomposition” of the metal peroxide, such as calcium peroxide, Harris et al further notes that such decomposition occurs “under acidic conditions to generate hydrogen peroxide”.

Accordingly, it is deemed that the delayed-release acid component and delayed-release oxidizer component necessarily or inherently inter-react in the manner of the reaction mechanism set forth in claim 1 wherein the acid derivative will initially react with the metal peroxide to yield the hydrogen peroxide component, and thus the acid reaction with the filter cake will be “delayed” until such reaction is complete. In this regard, Harris et al clearly indicates that the yielded hydrogen peroxide will then, in turn, degrade the polymeric portion of the filter cake in tandem with the acid derivative or component dissolving the acid-soluble portion of the filter cake.

As per claim 2, Harris et al clearly indicates that such acid-soluble component may comprise calcium carbonate.

Similarly, Harris et al discloses the presence of polysaccharide polymer in the filter cake, as called for in claim 3.

As per claims 4 and 5, as noted above, the oxidizer component may comprise calcium peroxide.

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As per claims 7 and 8, the recited concentration range of oxidizer component appears encompassed, overall, by the corresponding amounts or ranges in Harris et al (note col. 2, lines 31-36).

As per claims 19 and 21, it is noted that the carboxylic acid ester delayed-release acid component may comprise one or more of the components recited, such as lactone.

As per claim 20, note that Harris et al may further comprise an enzyme, such as the recited esterase enzyme in order to enhance the overall filter cake degradation and removal.

As per claim 22, it is deemed that well bore filter cakes are routinely formed or emplaced during the drilling process.

As per claim 23, it is deemed that Harris et al necessarily or inherently provides sufficient delayed-release acid component to both effect the decomposition of metal peroxide "under acidic conditions to generate hydrogen peroxide" and then effect complete dissolution of the acid-soluble portion of the filter cake, in order for the Harris et al process to operate as disclosed therein. The recited amount of delayed-release acid component set forth in claims 24 and 25 appears encompassed by the corresponding amounts and range(s) of delayed-release acid component set forth in Harris et al (note col. 2, lines 23-30).

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al (6,763,888) as applied to claim 1 above, and further in view of Todd et al (2005/0103496).

Todd et al discloses both the use of a delayed-release oxidizer component in an encapsulated form and the additional limitation of including the complete filter cake degradation composition within a gravel pack fluid, which is circulated during a gravel packing operation.

Accordingly, it would have been obvious to one of ordinary skill in the art to which the invention pertains, to similarly encapsulate the delayed-release oxidizer component of the filter cake degradation composition utilized in the method of Harris et al, as taught by Todd et al, in order to further control the delayed releasing of such oxidizer component, as called for in claim 9.

It would have been also obvious to one of ordinary skill in the art to which the invention pertains, to similarly include the complete filter cake degradation composition utilized in the method of Harris et al in a gravel pack fluid, as taught by Todd et al, in order to render the overall Todd process more economically viable by reducing the number of well completion steps needed prior to the final recovery and production of mineral fluids, as called for in claim 15.

The components and component concentration ranges recited in claims 10-14, 17 and 18 are deemed obvious matters of choice or design based on, e.g., the relative availability and cost effectiveness of such components, such as the gravel packing materials of claim 18, and/or based on the characteristics and well environment of the particular formation(s) actually encountered in the field.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

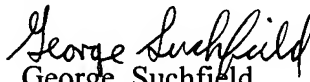
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13. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Suchfield whose telephone number is 571-272-7036. The examiner can normally be reached on M-F (6:30 - 3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


George Suchfield
Primary Examiner
Art Unit 3676

Gs
November 10, 2005